GCE AS MARKING SCHEME

SUMMER 2016

**ECONOMICS – NEW AS COMPONENT 1
B520U10-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2016 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GENERAL MARKING GUIDANCE

Positive Marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme, nor should marks be added as a consolation where they are not merited.

For each question there is a list of indicative content which suggest the range of economic concepts, theory, issues and arguments which might be included in learners' answers. This is not intended to be exhaustive and learners do not have to include all the indicative content to reach the highest level of the mark scheme.

The level based mark schemes sub-divide the total mark to allocate to individual assessment objectives. These are shown in bands in the mark scheme. For each assessment objective a descriptor will indicate the different skills and qualities at the appropriate level. Learner's responses to questions are assessed against the relevant individual assessment objectives and they may achieve different bands within a single question. A mark will be awarded for each assessment objective targeted in the question and then totalled to give an overall mark for the question.

EDUQAS NEW AS ECONOMICS - COMPONENT 1

SUMMER 2016 MARK SCHEME

Q1 (a)	Explain what is meant in economic theory by inelastic cross price elasticity of demand.	Total 2
	AO1 **2 marks** Good understanding of elasticity in the context of cross elasticity of demand. Understands that demand for one good will change less than proportionally following a change in the price of the other (may be implicit). XED is below 1 plus understanding of what XED shows. **1 mark** Understands inelastic but not in the context of cross elasticity of demand. Or Understanding of cross-elasticity but no reference to proportionality.	

Q1 (b)	The price of beer in London currently (Sept 2014) averages £3.80 per pint. If the price of beer in London pubs was to increase from £3.80 to £3.99 per pint, calculate the expected change in the demand for spirits in London pubs. [4]	
Band	AO1	AO2
	2 marks	2 marks
2	2 marks Formula for XED and percentage changes are understood (either by statement or by evidence from working). Understanding of cross elasticity is worth 1 mark. Understanding of inelastic is worth 1 mark.	2 marks Answer is correct.
1	1 mark Formula for XED is understood (either by statement or by evidence from working). **Or** Formula for calculating a percentage change in understood (either by statement or by evidence from working).	1 mark Answer is partially correct. Either the correct percentage change in the price of beer is calculated but the XED coefficient is applied incorrectly or the percentage change in the price of beer is calculated incorrectly, but the XED figure is correctly applied to their own incorrect percentage change (i.e. OFR).
0	0 marks No correct formulae.	0 marks Answer is incorrect.

Indicative content:

Correct answer is worth 4 marks straight off, even if no working is shown.

AO1:
Cross price elasticity of demand measures the proportional change in the quantity demand of one good to the change in the price of another.

It is the percentage change in the quantity demanded of good A divided by the percentage change in the price of good B.

AO2:
Percentage change in the price of beer: £3.99 - £3.80/£3.80 = +5%
XED = +0.26 between beer and spirits.

Therefore the expected change in the demand for spirits will be 5% X 0.26= 1.3%

Q2 (a)	Using a supply and demand diagram(s), explain why it might be that doctors have higher average weekly earnings than nurses. [8]		
Band	AO1	AO2	AO3
	2 marks	4 marks	2 marks
	Is the diagram correct?	Has the context and data been well used to explain differentials?	Has the difference been explained clearly in theoretical terms?
2	**2 marks** Good understanding of supply and demand diagrams Correct diagram with supply of doctors to the left of/more inelastic than that of nurses and the demand for doctors to the right of that of nurses. If two diagrams are used, the relative supply and demand differences must be clear. Equilibrium wages marked in correctly.	**3-4 marks** Good, developed understanding of the context of doctors and nurses. Two appropriate factors influencing the supply and demand for doctors are identified and explained, **or one factor is developed** very thoroughly showing excellent contextualisation (eg use of table). Does not have to cover both supply and demand.	**2 marks** Good analysis of wage differentials The answer explains clearly how supply and demand factors interact to make the wages of doctors higher than those of nurses – applied factors are fully analysed in the diagram. Does not have to cover both supply and demand.
1	**1 mark** Limited understanding of supply and demand diagrams If only supply or demand dealt with (1) or both S and D are right but equilibrium wage is not marked in. Two diagrams are used but either demand or supply are not clearly lower/more inelastic/higher as appropriate.	**1-2 marks** Limited application to the context Only one factor is developed, or two factors are identified but not explained. Does not have to cover both supply and demand. **Or** factors are not identified, but use is made of the actual table for 1 or perhaps 2 marks if well integrated.	**1 mark** Limited analysis of wage differentials Some explanation is present, but perhaps only one factor is linked back to wages in only limited amounts of detail, or the diagram is really just asserted rather than explained. **Or** supply and demand factors are analysed to explain wage differentials but without reference to the diagram.
0	**0 marks** Only one factor/equilibrium not marked in.	**0 marks** Application to context too weak to be credited.	0 marks No valid explanation.

AO1 and AO3 are centred around how well the diagram has been analysed and AO2 is about the context of doctors and nurses and using the data provided.
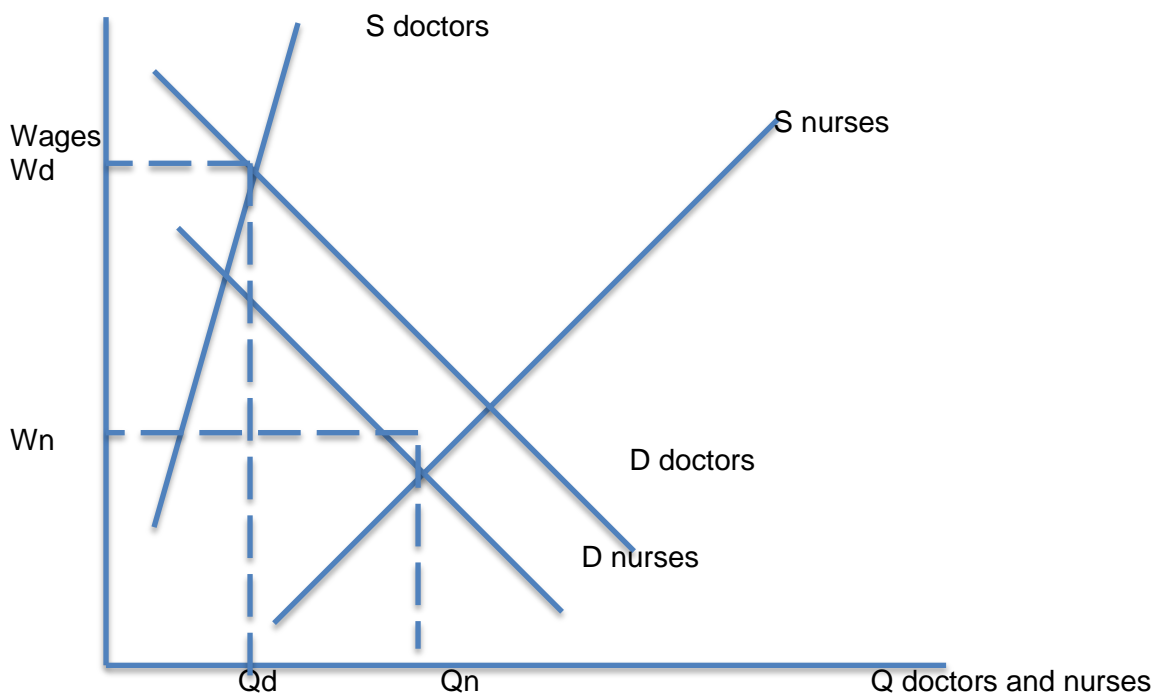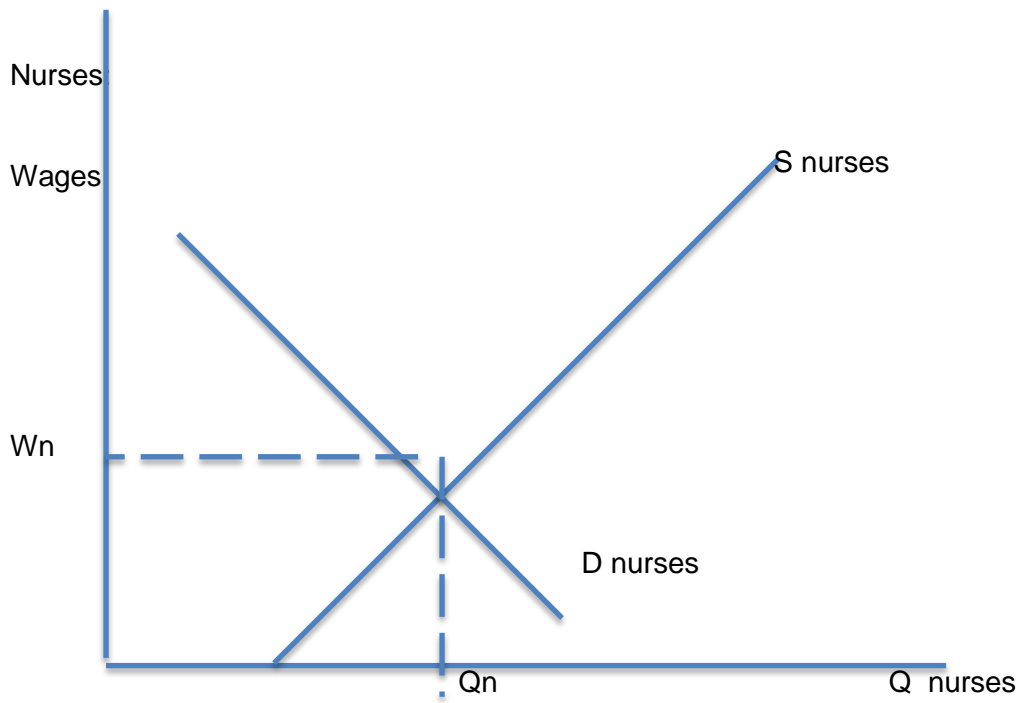
Indicative content

Supply of doctors at a given wage rate is likely to be lower than the supply of nurses because of the length and costs of training, qualifications required, restricted number of places at medical school etc.

Demand for doctors at a given wage rate is likely to be higher than for nurses because they have greater training and are therefore potentially more versatile within the workplace. Hence demand will be higher at a given wage rate.
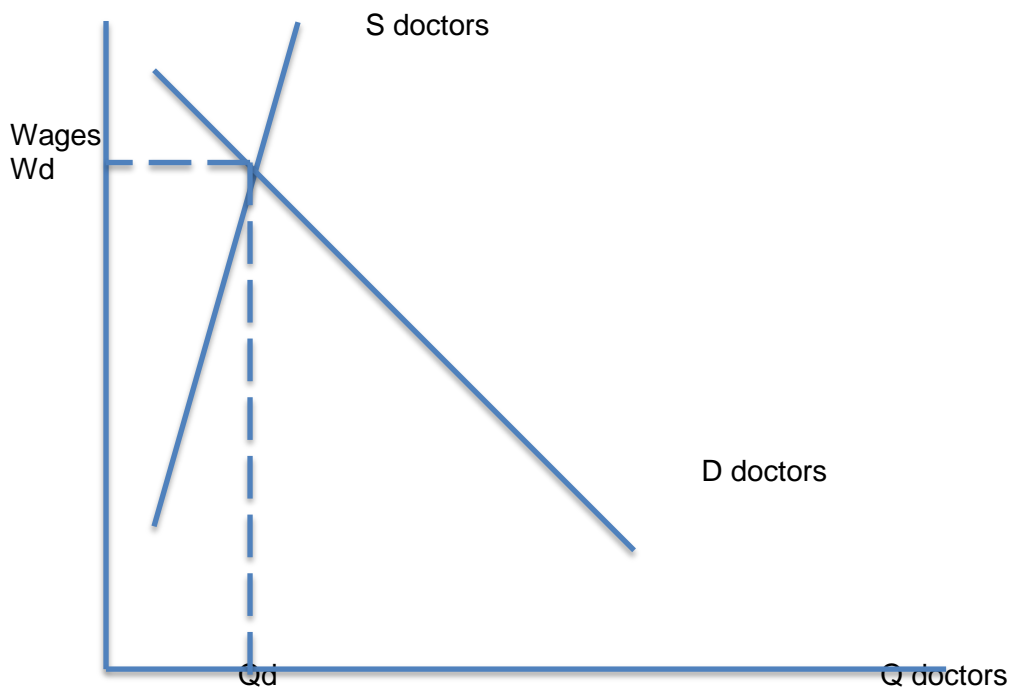
Perception of doctors being more 'valuable' at some level than nurses, being the ones who 'cure' ailments.

Therefore with lower supply and greater demand, wages will be higher.

Nurses

Wages

S nurses

Wn

D nurses

Qn   Q nurses

Doctors:

S doctors

Wages
Wd

D doctors

Qd   Q doctors

Q2 (b)	Explain a possible reason that the median weekly earnings for doctors are lower than the mean weekly earnings.	Total 4
	AO1 **2 marks** Good understanding of the difference between the mean and the median. Mean is total salaries divided by number of workers. Median is the ranked middle salary. Accept good understanding of one and implicit understanding of the other. (This may well be illustrated through use of an example rather than stated). **1 mark** Limited understanding – perhaps only understands one of the two and this may be implicit. **AO2** **2 marks** Well applied to the context – some doctors are likely to be very highly paid experts, hence distorting the mean, whereas the median will be unaffected. Age/experience profiles of the profession. – junior doctors, for example are relatively poorly paid, likewise nurses' salaries have an upper limit/ tend to rise more slowly. **1 mark** Relevant example is given but not clearly related back to the reason for the difference between the mean and median. *1 mark will be some reference to a medical context which asserts that the mean will be higher. 2 marks is for developing the example clearly.*	

Q3	Discuss the extent to which web sites such as raileasy.co.uk might help to correct market failure in this case. [8]		
Band	AO1 Is market failure well understood?	AO2 Has the context been well used to illustrate how market failure might be corrected?	AO4 Has there been qualification of the extent to which market failure might be corrected?
	2 marks	4 marks	2 marks
2	**2 marks** Good knowledge of market failure demonstrated.	**3-4 marks** Good application to the context. Good use of the context to show why market failure might be corrected; strong application to information failure/other market issues. Answers in this band will explain how improved information for rail passengers will lead to a better market outcome *Or* *There is a clear and convincing case made that this will make very little difference to the outcome in the market and will not really help to correct market failure at all or may create new, worse misallocations.*	**2 marks** Good evaluation. A strong two sided answer. Clear evaluation of the idea that better information will correct the market failure in this case – eg just because people have information doesn't mean that they will act on it. *Or* *The answer evaluates the idea that the websites won't work by explaining clearly that under some circumstances the market failure might be corrected – clear but brief explanation of how improved information might help in this regard.*
1	**1 mark** Limited knowledge of market failure demonstrated.	**1-2 marks** Limited application to market failure in the data showing partial application of information failure. Answer applies to the context, but is unconvincing in its link back to market failure. *Or* *There is a reasonable case made that the websites will not really make very much difference, but points are not fully developed or explained.*	**1 mark** Limited evaluation Answer has two sides, but the evaluation is limited. Partial evaluation of the subject matter – ideas are valid but not developed/explained properly. *Or* *The answer evaluates the idea that the websites won't work by arguing that they might help a bit, but the answer is not well rooted in the idea of market failure being corrected, probably being more along the lines of it might help better decisions.*
0	**0 marks** Knowledge of market failure shown is too limited to credit.	**0 marks** No developed use of the data.	**0 marks** No valid evaluation present.

A one sided answer can therefore score no more than 6 marks (2 for a good understanding of market failure and 4 for a well applied illustration as to how market failure might or might not be corrected.

AO2 and 4 are reversible so whichever side of the answer is best applied is AO2 and the counterargument is AO4. Many strong answers argue that it won't really work more effectively – allow up to 4 for this as AO2.

Indicative content:

AO1:

- Market failure is a situation in which an unregulated market misallocates resources, resulting in an overall welfare loss relative to the maximum possible.
- The market mechanism fails to produce an efficient allocation of resources, resulting in a welfare loss.

Good understanding will include both the idea of resource misallocation and welfare loss (which may be implicit – consumers paying unnecessarily high prices).

AO2:
The key is that application needs to be linked to the context of the increased information. They answer doesn't have to talk about information asymmetry, but it does need to be rooted in the idea that because consumers can now access cheaper tickets, some different types of market failure might (or might not) be corrected.

- Passengers are paying too high a price for tickets because they are unaware of cheaper deals. Because prices are too high, fewer people are travelling on trains than might otherwise be the case, meaning that there is an overall welfare loss. This may well be linked to external costs from car use, therefore if prices can be reduced, external costs from car use might be reduced.
- Consumers are losing welfare by paying higher prices than they need to; this may drive up inequality as the impact on low income groups is greater (although they might not be regular train users)
- Rail passengers do not have full information on ticket prices and thus often overpay. Web sites such as raileasy.co.uk give rail passengers more complete information. Without these web sites there is asymmetry of information.

AO4:
The evaluation needs to be centred around the context – in other words the website and what that offers.
- Unlikely to cover all types of fares – not everywhere will have a possible split ticket and even if they do, savings won't be made in all cases, therefore only a small number of routes might be covered.
- Requires people to buy tickets in advance – not everyone is that organised.
- People need to know about the website – information problems may get in the way here as well.
- Just because people know that they might be able to save money doesn't mean that they will be bothered to act.
- People may be worried about the legality of the scheme, thinking that it is too good to be true and therefore not use it.
- These types of websites often transitory, therefore consumers may not know they exist and/or their lack of permanency make consumers less confident in using them.

Q4 (a)	Compare what has happened to prices in Britain and the US between 2011 and 2014.	Total 4
	AO2 **1 mark** for understanding that prices have been rising over the period in both countries **1 mark** for understanding that the rate of change of prices has fallen – prices rising more slowly at the end than the beginning **1 mark** for effective, direct, use of the data **1 mark** for a clear observation of the differences between the pattern of price changes/inflation in the UK and the US	

Up to 2 for a good comparison of inflation rate.

Q4 (b)	Using an Aggregate Demand and Aggregate Supply diagram, explain the reasons for the trends shown in the chart between 2011 and 2014. [8]		
Band	AO1	AO2	AO3
	Is the diagram correct?	Are the factors in the data applied to the diagram?	Are the reasons for falling inflation/changes in AD/AS well analysed?
	2 marks	2 marks	4 marks
2	**2 marks** Good understanding of AD/AS diagrams. Correct diagram showing AD shifting to the left (or shifting to the right more slowly than it might otherwise have done) and AS shifting downwards, hence leading to a lower level of equilibrium prices than would otherwise have been the case.	**2 marks** Good application to the context. Answer explains how the factors identified match the AD/AS diagram – the diagram is applied appropriately to this context. 1 mark for linking economic weakness/Chinese slowdown to AD (or arguably to AS if the link is made to falling commodity prices). 1 mark for linking falling oil prices to the shift in AS.	**3-4 marks** Good analysis. There is a good analysis of what stops prices rising **in the real world** and the answer deals with both slowing demand and falling costs. Bottom band answers will tend to have one developed factor and one less developed one (even if both factors aren't shown on the diagram) and do not relate to inflation in the real world. **All answers in this band are in the context of the case.**
1	**1 mark** Limited understanding of AD/AS. Only one shift is correctly shown, or both shifts are shown but there are very major weaknesses with the diagram.	**1 mark** Limited application to the context. One factor is identified and linked appropriately to the diagram.	**1-2 marks** Limited analysis of relevant factors. Analysis of **one** AD/AS factor (in depth = 2, superficially=1). Answer analyses the reasons for shifts in AD/AS (rather than just asserting them), but the link to inflation is asserted rather than explained. **Or** Two factors are dealt with superficially.
0	**0 marks** Poor understanding of AD/AS. Diagram is incorrect.	**0 marks** Poor use of context.	**0 marks** Diagram only, no reasoned argument – fall in inflation is asserted not explained.

AO1 = diagram: 1 mark for dealing appropriately with AD and 1 mark for dealing appropriately with AS.
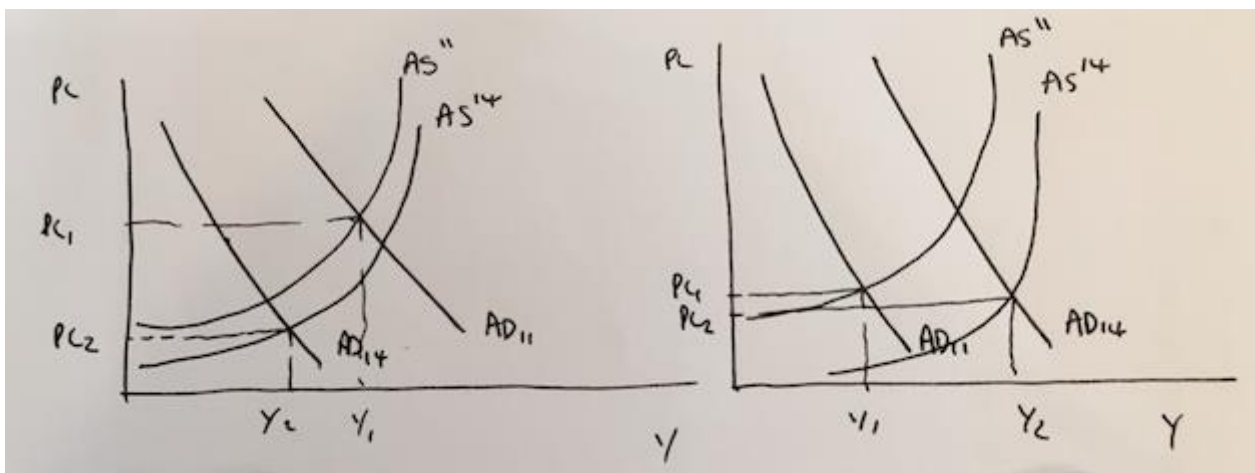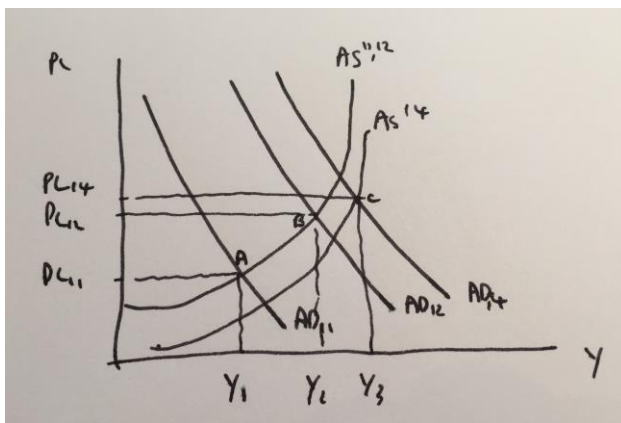
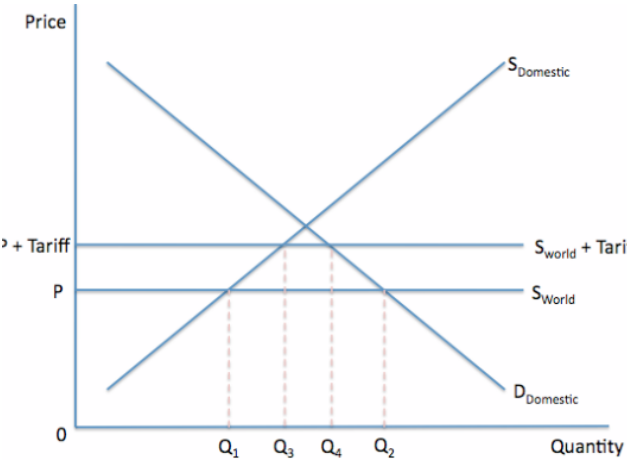Doing only one of these is therefore limited understanding.

Indicative content:

Slower economic growth globally restricts demand for firms' products, therefore making it harder to increase prices/forcing them to reduce price to stay competitive. Demand pull inflation will be reduced.

Falling oil prices reduce production costs for many firms, therefore meaning that prices do not have to be increased or can be reduced, particularly important in a world where demand is slowing. Cost push inflation will be reduced.

Possible diagrams:

Q5 (a)	Using a diagram, explain how the tariffs on imported Chinese and Taiwanese PV panels would be expected to:
	    (i) **Reduce the imports of such panels into the US (3)**
	    (ii) **Increase the producer surplus of US manufacturers of solar panels (3).**
		Total
		
		6

	AO1 Fall in imports identified on the diagram (Q1-Q2 to Q3-Q4). Increase in producer surplus identified on the diagram (as the distance between P+tariff and P shaded across to the domestic supply curve). **AO3** Each of the above is explained. It is clear that in both cases the reasons *why* imports fall and producer surplus rises in terms of the diagram are fully analysed. If the answer has an inappropriate or incorrect diagram, they can still earn marks here by explaining the points identified below. AO3 is the **explanation** of the diagram not just repeating what happens on it – why do imports fall and why does producer surplus rise? **Imports:** 1 mark for explaining that total demand falls as a result of the higher price. 1 mark for explaining that US producers take a higher share of the market. **Producer surplus:** 1 mark for explain that there are higher prices for existing US firms. 1 mark for *either* developing this further and explaining that the gap between price and MC/the price firms would be prepared to sell at is now greater *or* explaining that new US firms can now enter the market (and earn producer surplus as well).	**2** **4**

Q5 (b)	Using the data, discuss whether the US government is right to impose the tariffs described in the data on Chinese and Taiwanese manufacturers of solar panels. [8]		
Band	AO2	AO3	AO4
	Is the data well used on one side of the case?	Have the effects of tariffs been well analysed	Have data and theory been well used to develop arguments on both sides of the debate?
	2 marks	2 marks	4 marks
2	**2 marks** Good use of data Data is well used to support one side of the case (see indicative content).	**2 marks** Good, developed, explanation of the positive or negative effects of the imposition of a tariff stretching beyond just factors that are present in the diagram, unless these factors are developed in context.	**3-4 marks** Good evaluation Well-evidenced arguments are made on both sides of the case. Top of band answers may come to a qualified conclusion, but this is not essential.
1	**1 mark** Limited use of data to support one side of the case (see indicative content).	**1 mark** Limited analysis Some explanation of the positive and negative effects of the imposition of a tariff stretching beyond just factors that are present in the diagram, unless these factors are developed in context.	**1-2 marks** Limited evaluation Answer is clearly two-sided, but arguments are not well developed on both sides.
0	**0 marks** Data used in a superficial way or not at all.	**0 marks** Assertion only – points not explained.	**0 marks** One sided answer, or evaluation is at best throw-away.

Probably helpful to think of this as two banks of 4 marks.

The case for (or against is worth 2 for theory (AO3) and 2 for application (AO2).

The case against (or for) is 2 for theoretical development (AO4 band 1) and then the final 2 (AO4 band 2) are for:

(i)   Further use of context
(ii)   Effective qualification of the context used on the other side
(iii)   A well-judged conclusion, which will be based on the case

Indicative content:

Tariffs can raise revenue for the US government, but this is hardly very significant in this case – the amount raised will be very small relative to the size of the US economy.

Jobs in US manufacturing of panels will be saved – the tariffs on China in particular are high, protecting the US industry from unfair competition.

Demand for solar power is growing in the US, so this is arguably some form of infant industry argument (or maybe strategic industry argument) that the US needs its own domestic solar panel producers to avoid long term dependency.

Jobs are being hit elsewhere (installation – costs are 25% higher than elsewhere in the world).

Solar power is spreading less quickly in the US than elsewhere, meaning the environmental benefits are not being fully derived – could argue that the tariff is therefore some form of government failure.

Tariffs tend to be inflationary- although against this is the point that, in this case ,the reduced energy costs of the future caused by the solar panels will actually work to reduce inflation.

There is no evidence presented that Chinese and Taiwanese producers are actually dumping – it may simply be that they are more efficient/have lower wages and this is what comparative advantage and trade is supposed to be about.

China in particular (perhaps less so Taiwan) will be likely to retaliate, slowing growth and trade between the two countries and causing job losses elsewhere in the economy.

Therefore much depends on the extent to which the claims of dumping are genuine or whether they are simply a cover for the desire to build up an inefficient domestic sector for strategic reasons.

Q6	With reference to the data, discuss the extent to which the fall in the value of the rouble (figure 1) is likely to be beneficial to Russia's economy. [8]		
Band	AO1	AO2	AO4
	Have the positive or negative effects of a fall in the rouble been understood?	Has the data been well used to support the answer?	Have data and theory been used to discuss the extent to which the deprecation might be beneficial?
	2 marks	2 marks	4 marks
2	**2 marks** Good understanding of either the positive or negative effects of a fall in the rouble on the Russian economy. Answer looks at more than just the trade effects. Good depth of understanding is shown.	**2 marks** Good use of context. Data is well used to support one side of the case (see indicative content).	**3-4 marks** Well-developed, evidenced arguments are made on both sides of the case. Top of band answers may come to a qualified conclusion, but this is not essential.
1	**1 mark** Some knowledge of either the positive or negative effects of a fall in the rouble. Either only the trade effects are well developed, or a several impacts are asserted without good understanding being shown.	**1 mark** Limited use of data to support one side of the case (see indicative content).	**1-2 marks** Limited evaluation Answer is clearly two-sided, but arguments are not well developed on both sides.
0	**0 marks** Only a very narrow range of points are asserted without understanding being shown.	**0 marks** Data used in a superficial way or not at all.	**0 marks** One sided answer, or evaluation is at best throw-away.

Probably helpful to think of this as two banks of 4 marks.

2+2 for well-applied discussion of the advantages to Russia,
2+2 for well-applied discussion of the problems for Russia.

Indicative content:

Depreciation is good: Rouble has lost half its value so in theory Russian goods and services will look more attractive on world markets, increasing AD and helping to support employment.

However, Russia's exports are primarily energy (65%), which are often price inelastic and priced in dollars in any case (although the fall in the rouble means that Russia's oil income has been protected in Rouble terms).

The uncertainty over economic sanctions may also mean that the increase in exports may be slow to materialise as tourists and businesses are hesitant about doing business with Russia.

Furthermore 60-80% of goods such as beef, shoes and pharmaceuticals come in from abroad. These are basic goods with few substitutes and may therefore have low PED, meaning that the short run impact of the fall in the rouble may be an increase in the value of imports greater than any increase in export revenue. Employees in those sectors may find themselves made redundant as firms look to make cost savings.

The fact that imports of consumer goods are quite significant may mean that the collapse in the rouble has cost-push impacts across the economy as a whole, creating the risk of stagflation, especially if export demand doesn't pick up.

The increase in import prices may also hit living standards as wages are unlikely to keep up.

The short run impact on growth is therefore likely to be unfavourable, although in the longer term new markets may begin to open up for Russian exports and domestic producers may be able to step in to reduce import dependency meaning that in the longer term, growth may rise.

Fall in the rouble has protected Russia's oil revenue in roubles (50% collapse in rouble has matched the 50% fall in oil prices in $, leaving the Russian government's rouble revenue unchanged).

Possibility of competitive devaluations/depreciations.